Open Education Resources (OER)

History of OER

- Open Educational Resources began with MIT open course project "global open education resource movement-2001"
- The term was adopted by UNESCO's 2002 Forum on **"Impact of Open Courseware for higher education in developing countries"**

- The OER movement is comprised of

  1. Open Course Ware (OCW)

  2. OER Publishers

  3. OER Repositories

  4. Publicly-Funded Initiatives

Definition

OCW: Educational content created by institutions and published for free access by target communities via internet under intellectual property licenses

Open educational resources (**OER**) are freely accessible, openly licensed text, media, and other digital assets that are useful for teaching, learning, and as well as for research purposes

Principles:

- **Re-use**: People are allowed to use all or part of the work for their own purposes (download an educational video to watch at a later time)

- **Re-distribute:** People can share the work with others (share an article by-email to a colleague)

- **Revise:** People can adapt, modify, translate, or change the work (a book written in English and turn it into a Hindi audio book)

- **Re-mix:** People can take two or more existing resources and combine them to create a new resource

- **Retain:** No digital rights management restrictions (DRM); the content is yours to keep, whether you're the author, an instructor using the material, or a student.

Different formats OER

Online textbooks

Youtube clips

Animations and simulations

Some MOOCs

Video recorded lectures

Web-based textual materials

Digital diagrams and graphics

Classification of OER

Based on types
1. Text/Print
2. Visual/Photograph
3. Audio
4. Video/Audio-Visual
5. Animation

Based on licensing
1. Copy right protected
2. Creative commons
3. Public domain

Advantages

- Expanded access to learning
- Scalability
- Augmentation of class materials
- Enhancement of regular course content
- Quick circulation
- Less expense for students
- Continually improved resources

Limitations

- Quality issues
- Lack of human interaction between teachers and students
- Language barriers
- Technological issues
- Intellectual property /copyright concerns
- Sustainability issues

Organizations in OER

Campus of Open Learning (COL-SOL) – New Delhi

✓ Established to introduce Job Oriented courses to youth while pursuing studies

✓ Learning through the distance education mode to attain higher education and vocational skills.

✓ The students of School of Open Learning more than 200,000 in number

Commonwealth Open Schooling Association (COMOSA) – UP

✓ COMOSA is a non-profit organization committed to support the efforts of open schooling institutions

✓ Programs of school education for sustainable development in commonwealth countries through Open and Distance Learning Mode

National Council of Educational Research and Training (NCERT)

✓ The objectives are to undertake, promote and coordinate research in areas related to school education; prepare and publish model textbooks, supplementary material, newsletters, journals and develops educational kits, multimedia digital materials,

Central Institute of Educational Technology (CIET) - Delhi

- ✓ Premiere national institute of educational technology to promote utilization of educational technologies viz. radio, TV, films, Satellite communications and cyber media

Connected Learning Initiative (CLIx)

- ✓ A technology enabled initiative at scale for high school students. The initiative was seeded by Tata Trusts, Mumbai and is led by Tata Institute of Social Science

Information and Library Network (INFLIBNET) - Gujrat

- ✓ Connecting Libraries and information centers through a nationwide high speed data network

Pratham Books - Karnataka

- ✓ Nonprofit children's book publishing house, uses CC licenses to further distribution, translation and reuse of its work
- ✓ Enables every child to have open access to stories in their mother tongue

The National Institute of Open Schooling (NIOS) ,1989

- ✓ NIOS provides opportunities to interested learners by making available the following Courses of Study through open and distance learning (ODL) mode. Largest Open Schooling System in the world

Indira Gandhi National Open University (IGNOU), 1985

- ✓ offering high-quality teaching through the Open and Distance Learning (ODL) mode. Serves over 3 million students in India and other countries

- ✓ The School of Agriculture (SOA), established in January 2005 at IGNOU, strives to develop agricultural entrepreneurs and agri-business managers

OER Services

e-PG Pathshala

- Provides e-content in 70 subjects of social sciences, arts, fine arts and humanities, natural & mathematical sciences, linguistics and languages

The National Repository of Open Education Resources (NROER)

- Collaborative platform, brings together everyone interested in school and teacher education in India

- Hosts large number educational resources in many subjects and in different Indian languages for Primary, Secondary and Senior Secondary classes. Resources are available in different formats like Video, audio, documents.

Telangana Open Educational Resources (TROER)

- OER repository for resource creation of the teachers, by the teachers and for the teachers of Telangana

Vidya-mitra

- An online learning portal for all the e-content projects developed under the NME-ICT (National Mission on Education through Information and Communication Technology),MHRD

Audio-visual OER

National Program on Technology Enhanced Learning (NPTEL) : collaborative initiative of the IITs and (IISc) with financial support from MHRD. Provides access to recorded video lectures of different engineering disciplines

Consortium for Educational Communication (CEC) Produce video for Gyan Darshan educational channels and Edusat

Project Open Source Courseware Animations Repository (OSCAR): Initiative of the IIT, Bombay in collaboration with the (NME-ICT) creates a repository of web-based, interactive animations for teaching various concepts and technologies.

e-GyanKosh of Indira Gandhi National Open University (IGNOU): Provide open access to outstanding video lectures recorded at the IGNOU studio for Gyan Darshan educational channels. This YouTube channel maintains an IGNOU Broadcast Video lectures.

AgMOOCs :Initiative of NPTEL with collaboration IITK and Commonwealth of Learning, Vancouver focusing on developing quality educational contents for agricultural education.

SWAYAM: "Study Webs of Active –Learning for Young Aspiring Minds program": Aims at providing access, equity and quality contents for learners. It hosts course from 9th class till post-graduation to be accessed by anyone, anywhere at any time.

Textual OER

1. Online textbooks of the National Council of Educational Research and Training (NCERT)

2. e-GyanKosh of IGNOU

3. National Science Digital Library (NSDL)

4. Vidyanidhi – digital library for theses and dissertations: initiative of the University of Mysore

5. Krishikosh a Digital Repository of NARES :Under National Agricultural Innovation Project (NAIP)

Digital repository of accumulated knowledge in agriculture and allied sciences, having collection of old and valuable books, old journals, thesis, research articles, popular articles, monographs, catalogues, conference

Websites for Open Educational Resources in India

1. **http://www.nroer.in** :National Repository of Open Educational Resources is initiated by the Department of School Education and Literacy and MHRD.

2. **http://www.ebasta.in :** eBasta is governments Digital India initiative, this project has to make school books accessible in digital form as e-books to be read and used on tablets and laptops.

3. **http://www.ncert.nic.in/ncerts/textbook/textbook.htm**

4. **http://ictcurriculum.gov.in**/ :aims at realizing the goals of the National Policy of ICT in Schools Education and the National Curriculum Framework.

5. **https://books.google.co.in/**

6. **https://scholar.google.co.in/**

Licensing descriptions

PUBLIC DOMAIN		Freeing content globally without restrictions
CC BY		Attribution alone
CC BY SA		Attribution + Share Alike
CC BY NC		Attribution + Noncommercial
CC BY NC SA		Attribution + Noncommercial + Share Alike
CC BY ND		Attribution + No Derivatives
CC BY NC ND		Attribution + Noncommercial + No Derivatives

Conclusion

- Education is limitless
- e-Mediation are widening the limits
- Satisfies knowledge hungry learners
- Licensing issues make creator as well as user makes more responsible